CLAIMS:

What is claimed is:

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1. A method for georeferencing a raster map image, comprising the steps of:

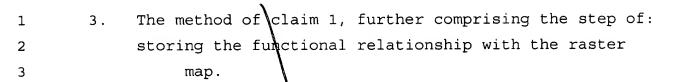
displaying a raster map and a georeferenced map;
identifying at least two geographically corresponding
points on the raster map and on the georeferenced
map;

associating an image coordinate of each point on the raster map with a geographic coordinate of the corresponding point on the georeferenced map; determining a functional relationship between the image coordinates and the geographic coordinates; and thereafter, for each additional corresponding points identified on the raster map and the georeferenced map,

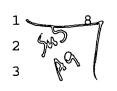
revising the functional relationship between the image coordinates and the geographic coordinates according to the additional corresponding points, and disregarding any points which are substantially inconsistent with the functional

relationship.

2. The method of claim 1, further comprising the step of: using the functional relationship to determine the geographic coordinates of features on the raster map.



- 1 4. The method of claim 1, further comprising the step of: 2 when the raster map is manipulated by a user, 3 manipulating the georeferenced map accordingly.
  - 5. The method of claim 1, wherein the geographic coordinates are latitude and longitude.
  - 6. The method of claim 1, wherein the raster map and the georeferenced map are displayed on the same computer display.
  - 7. The method of claim 1, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.



The method of claim 1, wherein the functional relationship is represented by a set of general linear functions.

| 9.   | Α   | CO | npult | er  | system,  | havin  | g a | it | least  | a   | pro | cesso | r    |
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| conn | ect | ed | to    | CON | nmunicat | e with | a   | re | adable | e a | and | write | able |
| memo | ry, | C  | cqmc  | isi | ing:     |        |     |    |        |     |     |       |      |

means for displaying a raster map and a georeferenced map;

means for identifying at least two geographically corresponding points on the raster map and on the georeferenced map;

means for associating an image coordinate of the each point on the raster map with a geographic coordinate of the corresponding point on the georeterenced map;

means for determining a functional relationship between the image coordinates and the geographic coordinates; and

for each additional corresponding points identified on the raster map and the georeferenced map, means for revising the functional relationship between the image coordinates and the geographic coordinates according to the additional corresponding points, and means for disregarding any points which are substantially inconsistent with the functional relationship.

10. The system of claim 9, further comprising:

means for using the functional relationship to

determine the geographic coordinates of features

on the raster map.

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- 11. The system of claim 9, further comprising:

  means for storing the functional relationship with the raster map.
  - 12. The system of claim 9, further comprising:

    means for when the raster map is manipulated by a

    user, manipulating the georeferenced map

    accordingly.
    - 13. The system of claim 9, wherein the geographic coordinates are latitude and longitude.
    - 14. The system of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display.
    - 15. The system of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points.
    - 16. The system of claim 9, wherein the functional relationship is represented by a set of general linear functions.

